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Fruit Notes

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Cornell Cooperative Extension
Lake Ontario Fruit Program

Volume 21 Issue 2 February 12, 2021

2021 CCE Winter Tree Fruit Conference – Evaluation Survey on Qualtrics and Materials on Teachable

Craig Kahlke

We had nearly 350 attendees at some of our sessions in last week's conference. The full recordings, and most of the other materials (PDF's of presenter-approved presentations, sponsor information, "hand-outs", etc.) are being posted to our Teachable site at: <https://cce-enychp.teachable.com/courses/enrolled/1210162>
First time on teachable? Click "Login" at the upper right corner of the page. Enter the email address you signed up with, and **Honeycrisp** or **HONEYCRISP** as your password. Click **Login**. On the next page, click, **No Thanks, Go Back to School** On the next page, click on the **Cornell NYS Tree Fruit Conference** box.

Feedback: While we already received much valuable feedback during the conference, if you attended we are asking you to fill out this brief (<10 minute) Qualtrics survey that will help us shape future educational programs. Please click here: https://cornell.ca1.qualtrics.com/jfe/form/SV_4UxbyZ6828ArSSO

Missed all or part of the conference? You can still register and view the full conference at: <http://blogs.cornell.edu/nystreefruitconference/>

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Winter Pruning to Manage Fire Blight (while continuing to grow the trees)

Janet van Zoeren, Kerik Cox, Anna Wallis and Mario Miranda Sazo

Winter pruning is always an important time to begin your fire blight management program for the season, and this year especially much so. Winter canker removal could make the difference for you between starting spring 2021 with “normal” fire blight pressure, versus potentially giving yourself a handicap by keeping around lingering bacteria from last year’s difficult season.

Here we discuss some reminders of how and when to prune for fire blight management, and

some tips for how to continue to grow the trees in areas with more severe damage.

Winter/Spring pruning in 2021: Remember that *Erwinia amylovora* bacteria can only survive in the orchard on or inside of living tree tissue, particularly at the margin of cankers. So, the more cankers you remove now, the less bacteria you will have to contend with in the spring.

Keep your eyes open (and train your crew to keep an eye open) for cankers in all blocks as you are pruning this winter. Hopefully you marked on



Fire blight canker beginning to ooze in the spring.

a map or flagged areas of high fire blight pressure last summer, so you can pay especially close attention for cankers in those areas. In blocks with high pressure last year, we recommend taking a few extra passes down those rows, focusing just on looking for cankers without the distraction of general pruning decisions.

Fire blight cankers appear as dark or black, cracking “scorch marks” on the bark, and often the leaves or leaf stems remain on the tree through till spring. These may not be oozing, but do not discount them.

When deciding where to cut when removing a canker, we recommend you use a hatchet or knife to peel bark away from the tree until you see healthy green tissue. Make your pruning cut approximately 4 inches into 2nd year wood. If the canker is in older wood prune 10-12 inches before the edge of the canker. If there are too many cankers in a block to warrant that level of detail, you can instead simply make the cut 3 feet before the canker in young vigorous trees, and 18 inches before in older slow-growing trees. In all cases, cutting beyond different ages of growth is the best practice as the fire blight pathogen moves across junctions between new and older tissue more slowly.

For trees 2 years old or younger, it is often safer to just pull the entire tree and replant later. For example, in the pear orchard image below, trees struggled with fire blight throughout the 2019 growing season. All trees

were removed in winter 2019/2020, and roots were excavated by early April 2020.

When the tree is growing, the bacteria will be moving and growing. During winter both the trees and the bacterium are dormant, so cuts can be made safely and equipment sanitation is not a concern. Make sure to remove cuttings or let them dry out in the orchard over the course of the remaining winter months. By the time temperatures reach ~40F, *Erwinia* bacteria will begin growing.

Prioritizing blocks by Evaluating risk. Take a good look at your orchard and the specific blocks within your orchard. Not every block will require the most aggressive management, and frankly, there isn't enough time to provide vigilant scouting and management to every tree or every row. **Prioritize blocks- *you may even consider ranking them*** and tailor your management (this winter and during the growing season) based on characteristics that will contribute to likely disease pressure.



Several mature pear trees had to be removed due to high fire blight pressure the previous season. Roots were excavated to prevent oozing and further contamination.

- **Disease pressure:** Did this block have fire blight last year? Has it ever had fire blight? If not, it is a very low risk block and requires less management.
- **Variety and rootstock:** Evaluate the susceptibility of the cultivars planted in each block and where possible include resistant varieties in new plantings. (<https://blogs.cornell.edu/applevarietydatabase/disease-susceptibility-of-common-apples/>)
- **Tree age and planting system:** Newly planted trees and high-density systems are at much higher risk of quickly being devastated. These trees have vigorous shoot growth, which is most susceptible to fire blight. In smaller trees, fire blight can quickly travel through the vascular system to the central leader, killing the tree, or travel systemically to the rootstock, girdling and killing the tree.

Tips to maximize safe grow of a new 2021 leader in a young tree that was heavily pruned due to FB in 2020:

For trees that were pruned back aggressively in the spring of 2020 to slow spread, we expect that a healthy tree will respond by growing many new shoots in 2021. To keep the tree growing vertically, the new shoots can be pruned to a single shoot (trained as a new central leader), to continue growing the young tree in newer plantings or to rapidly reach mature height in older plantings. For older plantings, the selected shoot should be of medium vigor without side shoots, hopefully with fruit spurs that will produce apples that will bend and weaken it in subsequent years. In the case of young trees that were heavily pruned and tree height was significantly reduced, we recommend you salvage tree structure and reconstruct it by selecting and training the most optimal shoot

where the leader was cut off. If the trees are too devastated by fire blight, it may be less frustrating to replant than try to retrain. If you do decide to retrain, try to choose the new leader so that it keeps the best possible vertical positioning of the old trunk section.

- Select the new leader when 2-4" long and cut competing shoots back with clippers to 2" long to prevent competition with the leader
- Train the new leader to the wire (ideally also to a vertical element 'bamboo', 'plastic twine', 'wire') with a rubber band, tape gun, or a wire loop as soon as it reaches each successive wire
- Apply 2-3 small doses of nitrogen to gently promote growth of the tree in 2021
- Use of PGRs can also promote 'vertical growth' of the new leader when trying to reconstruct a heavily pruned young tree due to FB (Promalin will promote maximum vertical growth/less feathering. MaxCel will promote better tree feathering/less vertical growth.)
- Water the trees (when needed) using trickle irrigation with low doses per tree but frequently
- Remove flowers manually or chemically
- If planning to crop the young tree in 2021, the unsupported terminal portion of the new leader above the last wire should be de-fruited for maximum shoot growth and good lignification during years 2, 3, and 4
- Pay close attention for signs of fire blight (train your crew for early detection), especially in blocks that are being pushed to fill space (with aggressive nutritional programs).
- If the tree doesn't respond to the above practices, it may be worthwhile to replace the tree to ensure that it doesn't become a source of fire blight in the coming season.

Spring Pesticide Applicators Training – Pre-Exam Coaching

Janet van Zoeren

Growers are strongly encouraged to pursue private applicator certification for all sprayer operators. As per usual, we will be offering a “Pre-Exam Coaching” in March to help sprayer operators prepare for the exam.

This training is only for those with experience and does not qualify for the 30-hour official DEC training – you are eligible for this coaching session if you have experience working with pesticides, either through working on your own farm or through employment on another farm.

The pre-exam coaching class will take place **virtually** on March 22, 24, 29, and 31, from 1-3pm each day. You will need access to a computer with good internet for each of those time slots (note that a local library may be able to provide a computer and/or internet). The cost will be \$35.

Important: there is a separate registration form for growers in [Orleans or Niagara Counties](#) (i.e.

west of Rochester), vs those in [Wayne Co](#) (i.e. east of Rochester). Both registration forms are available on our website at <http://lof.cce.cornell.edu>. We ask that you **print the registration document**, fill it in, and mail it in to the appropriate CCE office (address of the registration document).

There will also be a corresponding exam, which will be offered at both the Orleans County and Wayne County extension offices, on April 1st, open to anyone who completed the virtual course. The exam is separate from the training, and you must register through the DEC, and bring a check for the \$100 exam fee, to take the exam. To register for the exam or if you have questions regarding the Certification Process, please contact Justin Schoff at the Avon DEC office @ 607-622-8290.

If you have any questions about either of these trainings, you can call or email Janet van Zoeren: 585-797-8368 / jev67@cornell.edu.

Remote Produce Safety Alliance Growers Training & Farm Food Safety Plan Writing Workshop

March 3rd (8am-5:30pm) & March 4th (8:45am-2pm)
Zoom

Join Virtual PSA Trainers on Wednesday March 3rd via Zoom to gain your required food safety training by the Food Safety Modernization Act and many 3rd party food safety audits, such as Good Agricultural Practices (GAPs).

PSA Trainers will spend approximately seven hours of instruction time covering content contained in the area of worker health, hygiene, soil amendments, wildlife, agricultural water, post-harvest handling and sanitation, along with how to develop a Farm Food Safety Plan. Activities and interaction time among peers will also occur each day to meet the requirements from AFDO (Association of Food and Drug

Officials) and the Produce Safety Alliance related to attendee engagement.

Each participant farm will receive a manual. The manual includes curriculum module slides and slide notes divided by tabs with learning objectives. Additionally, references, a glossary, and FSMA-specific information is included. Registration is required by February 28th in order to ensure each farm receives the manual prior to the course beginning.

All participants that attended the entire course (March 3, all 7 modules) are eligible to receive a certificate from AFDO that verifies they

completed the training course. As this is a remote delivered course, participant engagement and attendance will be monitored by trainers throughout the training. This includes the need for access to high-speed reliable internet, a webcam turned during all the modules on the March 3 training, and a computer/laptop to participate in the Zoom sessions. Attendees will ONLY be eligible for an AFDO certificate of course completion if they attend and participate in all sessions on March 3.

On March 4th growers can join us for a day focused on writing their farm food safety plan. Trainers will be joined by NYS Department of Agriculture & Markets Farm Products inspectors to give guidance and input for farms in creating their farm food safety plans to meet the needs for a potential audit. At the conclusion of day two growers will have all components of their farm food safety plans outlined with the most critical pieces.

Day two is only for those who have previously attended a Produce Safety Alliance Grower Training or GAPs training. The price for both days includes a "Farm Food Safety Decision Tree", worker training posters for use on the farm, and a flash drive pre-loaded to the farm food safety

plan template, standard operating procedures, and log templates for use by the farm.

In order for a farm to participate, you must have the newer version of Microsoft Word loaded onto your computer, or be comfortable working within Google docs. We are utilizing Zoom for the training, you will need a high speed internet connection for smoothest participation experience. We also recommend a microphone to help in communication with both students and trainers.

Registration is limited to 30 farms each day, at a cost of \$35/farm for day 1 only, or both days. For day 2 only, the cost is \$10/farm. Please be advised that refunds are not available. Registration is required by February 28th to ensure that mailing of manuals can occur in a timely fashion and that farms will receive them prior to the start of the training on March 3rd.

To register for this training, please click here: (https://pub.cce.cornell.edu/event_registration/main/events_landing.cfm?event=2021remotepsatraining_203). If you are uncertain whether the course is for you, contact Craig Kahlke at cjk37@cornell.edu or 585-735-5448.

What's Bugging You First Friday Events

Amara Dunn, Matt Frye & Alejandro Calixto, NYS IPM Program

The New York State IPM Program is excited to launch a new virtual series, [What's Bugging You First Fridays](#). On the first Friday of each month at 12pm, half hour presentations will explore a timely topic and help people use integrated pest management (IPM) to avoid pest problems and promote a healthy environment. Our goal is to provide practical steps that people can take to avoid pest problems in and around the places they live, work, learn, and play.

Can you help us spread the word? Our first event will take place on Friday March 5th, where we'll

introduce the series and host a presentation about "*Spotted Lanternfly: A New Invasive Pest.*" We are hoping to reach a public audience with this information, and invite educators, Master Gardener Volunteers and others to attend. The link below will bring you to our landing page where you can find a description of the series, the proposed schedule, and a link to register. Attached you will also find a flyer for the event.

<https://nysipm.cornell.edu/whats-bugging-you/first-friday-events/>

FSA Fridays in February Webinar Series Continues

Lynnette Wright, USDA-FSA, New York

A series of free webinars will be presented by the U.S. Department of Agriculture's (USDA) Farm Service Agency (FSA) in New York State. FSA Fridays in February will cover a variety of programs and services FSA offers agricultural producers in New York. Topics include an overview of available programs and loans, conservation buffers, crop risk management programs, and loan programs.

The hour-long webinars will be held every Friday in February at noon. The webinars are free however pre-registration is required to get a link to each webinar. Please register at: <https://www.eventbrite.com/e/fsa-fridays-tickets-135329545313> or by emailing lynnette.wright@usda.gov.

Summary of each FSA Friday coming up in February:

Friday, February 19 at 12:00 p.m.: Risk Management Programs – learn about federal crop insurance and FSA's Noninsured Crop Assistance Disaster Program for row crops, forages, fruits, and vegetables.

Friday, February 26 at 12:00 p.m.: FSA Farm Loans – an overview of the funding opportunities available from FSA, including Farm Loan Programs, Farm Storage Facility Loans, and Marketing Assistance Loans.

FSA provides programs and loans to help farmers provide food, fuel, and fiber to millions of people worldwide. The New York FSA staff work hard every day to ensure that New York farmers have the information they need to participate in federally funded agricultural programs. FSA-administered programs benefit all Americans by providing stability for our agricultural producers, thus helping ensure a safe, abundant, and affordable supply of food and fiber.

If you need an accommodation to participate in one of these webinars, please contact Lynnette Wright at (315) 477-6309, or by e-mail at lynnette.wright@usda.gov, at least one day prior to the event. You may also contact Federal Relay Service at 1-800-877-8339.

Participation Sought for Survey on the COVID-19 Pandemic and Its Impact on Agricultural Operations

The New York Center for Agricultural Medicine and Health, Cornell Agricultural Workforce Development and the Center for Agricultural Development and Entrepreneurship will be contacting farmers in the next few months to get their perspectives on the COVID-19 pandemic and how it impacted their agricultural operations. Although surveys have already been conducted with the farm community, the flexibility of interviews provide farmers with the opportunity to talk about the issues or challenges that they felt were most important or

to provide important details that are often missed in surveys.

A few examples of interview topics include: What was the financial and emotional impact of the pandemic on you, your family, your workers? Was infection control guidance helpful or not helpful? and What could agricultural or governmental organizations have done to be more helpful? These interviews will thus give farmers a chance to improve pandemic response programs in future. Feedback will be summarized and shared with the farm

community, agricultural organizations and policy-makers.

If you have questions or you know of farmers that would like to participate, please contact Pauline Boyer at 607-547-6023, ext. 2238

You're Invited: NYFVI & Cornell Needs Assessment Workshop

The New York Farm Viability Institute and Cornell University have been teaming up with NYCA's Research & Education Committee to conduct a research and outreach needs assessment of the New York cider sector and we need your input. Please join us on Friday, March 26 from 9:00-10:30AM to share your thoughts and insights. Zoom link info will be sent once you've RSVP'ed. Potential topics will include fruit production, cider production, and marketing and economics. The information we collect will be used to inform future grant funding, research projects, and workshop topics. Join us!

Click here: https://cornell.ca1.qualtrics.com/jfe/form/SV_41GEI4Y7xGgPuM6

Mark Your Calendars

Meeting Title	FSA Fridays in February Webinar Series
Dates	February 19 th & 26 th
Time	12-1 PM
Location	Virtual
Brief Description of Meeting	FSA Fridays in February will cover a variety of programs and services FSA offers agricultural producers in New York. Topics include an overview of available programs and loans, conservation buffers, crop risk management programs, and loan programs.
Cost	Free, but please pre-register, link below.
Registration/Contact	Please pre-register at https://www.eventbrite.com/e/fsa-fridays-tickets-135329545313 or by emailing lynette.wright@usda.gov , 315-477-6309
Meeting Title	IFTA's Virtual Annual Conference
Dates	Feb 22-24
Time	All day
Location	Virtual
Cost	\$200
Brief Description of Meeting	The 2021 IFTA Annual Conference, Know Your Farm, Deliver the Best, will be held from Monday to Wednesday, February 22-24 , as five online sessions that mirror the usual conference format - two educational sessions on Day 1, a tour of orchards and research plots on Day 2, and two educational sessions on Day 3.
Registration/Contact	https://www.ifruittree.org/event/ifta-2021-annual-conference/ 509-585-5460, info@ifruittree.org

Meeting Title	Remote Produce Safety Alliance Growers Training & Farm Food Safety Plan Writing Workshop
Dates	March 3-4
Time	All day both days.
Location	Virtual (Zoom)
Brief Description of Meeting	\$35/farm for day 1 or both days, \$10/farm for day 2 only.
Cost	See full article in this issue.
Registration/Contact	To register for this training, please click here: (https://pub.cce.cornell.edu/event_registration/main/events_landing.cfm?event=2021remotepsatraining_203)
Meeting Title	What's Bugging You First Friday Events
Dates	March 5, 12, 19, 26
Time	12-12:30 PM
Location	Virtual
Cost	Free
Brief Description of Meeting	See article this newsletter.
Registration/Contact	https://nysipm.cornell.edu/whats-bugging-you/first-friday-events/ Amara Dunn, arc55@cornell.edu , 315-787-2206

Meeting Title	Spring Pesticide Applicators Training – Pre-Exam Coaching
Dates	March 22, 24, 29, 31
Time	1-3 PM
Location	Virtual
Brief Description of Meeting	See article this newsletter.
Cost	\$35
Registration/Contact	Important: there is a separate registration form for growers in Orleans or Niagara Counties (i.e. west of Rochester), vs those in Wayne Co (i.e. east of Rochester). Both registration forms are available on our website at http://lof.cce.cornell.edu . We ask that you print the registration document, fill it in, and mail it in to the appropriate CCE office (address of the registration document). Janet van Zoeren: 585-797-8368 / jev67@cornell.edu .

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Fruit Specialists



Craig Kahlke | 585-735-5448 | cjk37@cornell.edu
Team Leader, Fruit Quality Management

Areas of Interest: Fruit Quality and factors that affect fruit quality before, during, and after storage,
Crops: Blueberries, Raspberries / Blackberries, Strawberries, Apples, Apricots, Cherries, Nectarines, Peaches, Pears, Plums



Mario Miranda Sazo | 315-719-1318 | mrm67@cornell.edu
Cultural Practices

Crops: Blueberries, Raspberries / Blackberries, Strawberries, Apples, Apricots, Asian Pears, Cherries, Currants, Gooseberries, Nectarines, Peaches, Pears, Plums



Janet van Zoeren | 585-797-8368 | jev67@cornell.edu
Integrated Pest Management (IPM)

Areas of Interest: IPM of tree fruit and berry pests, biological control, and pollinators.
Crops: Blueberries, Raspberries / Blackberries, Strawberries, Apples, Apricots, Asian Pears, Cherries, Currants, Nectarines, Peaches, Pears, Plum



Mark Wiltberger | 315-272-8530 | mw883@cornell.edu
Business Management

Crops: Apples, Cherries, Nectarines, Peaches, Pears, Plums

For more information about our program visit us at lof.cce.cornell.edu